

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	kollmer-felix.in. and liquid adj metal	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 18:00
S2	1	kollmer-felix.in. and liquid adj metal.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 17:59
S3	88	250/423R and ion adj source and liquid adj metal	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:13
S4	4	S3 and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:37
S5	88	250/423R and ion adj source and liquid adj metal	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:50

## EAST Search History

S6	4	\$5 and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 20:53
S7	38	ion adj source and liquid adj metal and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:33
S8	1	SIMS and ion adj source near5 bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:47
S9	0	SIMS and ion adj beam near5 bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:34
S10	63	SIMS and ion adj beam and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:34
S11	2	"4686414".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:38

## EAST Search History

S12	39	ion adj source and bismuth adj ions	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:59
S13	3	S12 and liquid adj metal	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:50
S14	1	cluster adj beam and bismuth adj ions	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:52
S15	67654	ion adj beam andluster and bismuth adj ions	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:53
S16	0	ion adj beam and luster and bismuth adj ions	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:53
S17	3	ion adj beam and cluster and bismuth adj ions	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:55

## EAST Search History

S18	1	cluster adj beam and bismuth adj ions	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:55
S19	58	cluster adj beam and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 22:05
S20	12	("4856457").URPN.	USPAT	OR	ON	2007/12/02 21:58
S21	0	S20 and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:58
S22	0	S20 and "bi"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 21:58
S23	3515	ion adj source and "bi"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 22:00
S24	196	S23 and sims	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/02 22:01

## EAST Search History

S25	12	S24 and multiply adj charg\$4		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	ON	2007/12/02 22:03
S26	1	S19 and multiply adj charg\$4		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	ON	2007/12/02 22:03
S27	4	S19 and ion near5 charg\$4		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	ON	2007/12/02 22:04
S28	31	sims and cluster and doubly adj charged		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	ON	2007/12/02 22:06
S29	5	("6002128").URPN.		USPAT	OR	ON	ON	2007/12/03 07:35
S30	1	"5849093".PN.		USPAT;	OR	ON	ON	2007/12/03 07:36
S31	1	"3819941".PN.		USPAT;	OR	ON	ON	2007/12/03 07:37
S32	15	("3819941").URPN.		USPAT	OR	ON	ON	2007/12/03 07:39
S33	4	("4829179").URPN.		USPAT	OR	ON	ON	2007/12/03 07:42
S34	1	"3585383".PN.		USPAT;	OR	ON	ON	2007/12/03 07:45
S35	12	("4856457").URPN.		USPAT	OR	ON	ON	2007/12/03 07:51

## EAST Search History

S36	31	sims and cluster and doubly adj charged		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 08:05
S37	4	metal near5 cluster adj ions and multip!\$4 adj charg\$4		US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 08:53
S38	20	("5873523").URPN.		USPAT	OR	ON	2007/12/03 08:30
S39	1	S38 and metal adj ions		USPAT	OR	ON	2007/12/03 08:31
S40	0	("6825464").URPN.		USPAT	OR	ON	2007/12/03 08:33
S41	4	("5115131"   "5873523"   "6127680"   "6297499").PN.		US-PGPUB; USPAT; USOCR	OR	ON	2007/12/03 08:33
S42	1	"5873523".PN.		USPAT; USOCR	OR	ON	2007/12/03 08:36
S43	1	"5523566".PN.		USPAT; USOCR	OR	ON	2007/12/03 08:36
S44	1	"5523566".PN.		USPAT; USOCR	OR	ON	2007/12/03 08:43
S45	1	"5171989".PN.		USPAT; USOCR	OR	ON	2007/12/03 08:44
S46	1	"5170053".PN.		USPAT; USOCR	OR	ON	2007/12/03 08:44
S47	1	"4667100".PN.		USPAT; USOCR	OR	ON	2007/12/03 08:45

## EAST Search History

S48	140	metal and cluster and ion adj source and multipl\$4 adj charg\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 08:54
S49	1	S48 and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 08:55
S50	420	metal and ion adj source and multipl\$4 adj charg\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 10:37
S51	3	S50 and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 09:51
S52	2	("4562355").URPN.	USPAT	OR	ON	2007/12/03 09:00
S53	1	"4383177".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:01
S54	1	"3705320".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:02
S55	54	S50 and metal adj ions	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 09:11

## EAST Search History

S56	0	S51 and charge adj state					
S57	181	S50 and charge adj state	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 09:12	
S58	63	S57 and doubly	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 09:12	
S59	1	"5625184".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:40	
S60	1	"6204500".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:40	
S61	1	"5194739".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:44	
S62	1	"4994711".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:47	
S63	1	"4687938".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:47	
S64	1	"5294794".PN.	USPAT; USOCR	OR	ON	2007/12/03 09:48	

## EAST Search History

S65	74	ESI and metal\$4 adj ion and charge adj state	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 09:55
S66	2	S65 and bismuth	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 09:51
S67	2	ESI and generat\$4 near5 metal\$4 adj ion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 09:57
S68	10	ion adj source and spray and generat\$4 near5 metal\$4 adj ion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 10:06
S69	23	metal\$4 near5 ion adj source and multipl\$4 adj charg\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 10:25
S70	1	"4714860".PN.	USPAT; USOCR	OR	ON	2007/12/03 10:19
S71	1	bismuth and charge adj state adj distribution	USPAT; USOCR	OR	ON	2007/12/03 10:22
S72	1	bismuth and charge adj state near5 distribution	USPAT; USOCR	OR	ON	2007/12/03 10:22

## EAST Search History

S73	0	bismuth adj ions and charge adj state	USPAT; USOCR	OR	ON	2007/12/03 10:22
S74	0	bismuth adj ions and charge adj state	US-PGPUB; USPAT; USOCR;	OR	ON	2007/12/03 10:23
S75	563	bismuth adj ions	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S76	2	S75 and multip!\$4 adj charg\$4	US-PGPUB; USPAT; USOCR;	OR	ON	2007/12/03 12:02
S77	0	ion adj source and meatl adj ions and multip!\$4 adj charg\$4	EPO; JPO; DERWENT; IBM_TDB	US-PGPUB; USPAT; USOCR;	OR	2007/12/03 10:23
S78	54	ion adj source and metal adj ions and multip!\$4 adj charg\$4	EPO; JPO; DERWENT; IBM_TDB	US-PGPUB; USPAT; USOCR;	OR	2007/12/03 10:28

## EAST Search History

S79	28	spray and charged adj droplet and metal adj ion and charge adj state	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	ON	2007/12/03 10:29.
S80	1	"6124592".PN.	USPAT; USOCR	OR	ON	2007/12/03 10:33	
S81	11	ion adj source and liquid adj metal and charge adj state	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 10:40	
S82	4	liquid adj metal nearS ion adj beam and charge adj state	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 14:44	
S83	0	saito-yahachi.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 11:34	
S84	21	saito-yahachi.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 11:34	

## EAST Search History

S85	0	bismuth adj liquid adj metal adj ion adj source	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 11:38
S86	989	liquid adj metal adj ion adj source	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 11:38
S87	22	S86 and bismuth	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 13:10
S88	165179	S86 cluster	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 13:10
S89	65	S86 and cluster	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 13:10

## EAST Search History

S90	11	S89 and bismuth	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 13:34
S91	2	S89 and multiply adj charged	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 13:15
S92	2	S89 and charge adj state	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 13:15
S93	1	"4193013".PN.	USPAT; USOCR	OR	ON	2007/12/03 13:33
S94	1	"4143292".PN.	USPAT; USOCR	OR	ON	2007/12/03 13:33
S95	35	("4143292").URPN.	USPAT	OR	ON	2007/12/03 13:34
S96	1	S95 and bismuth	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 13:35

## EAST Search History

S97	14	(US-20060202130-\$).did. or (US-4426582-\$ or US-4467240-\$ or US-6002128-\$ or US-4856457-\$ or US-5130538-\$ or US-4829179-\$ or US-3819941-\$ or US-3585383-\$ or US-5873523-\$ or US-5523566-\$ or US-5523555-\$ or US-5898175-\$ or US-6204500-\$).did.	US-PGPUB; USPAT	OR	ON	2007/12/03 14:41
S98	3	S97 and mass near5 filter	US-PGPUB; USPAT	OR	ON	2007/12/03 15:21
S99	16	sims and liquid adj metal near5 ion adj beam	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 14:45
S10 0	7	S97 and coat\$4	US-PGPUB; USPAT	OR	ON	2007/12/03 15:21
S10 1	1	SIMS and primary adj ion near5 mass adj select\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:52
S10 2	0	primary adj ion adj beam near5 mass adj separat\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:53
S10 3	0	primary adj ion adj beam and charge adj state near5 mass adj separat\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:53

## EAST Search History

S10 4	0	SIMS and neutral near5 mass adj separat\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:55
S10 5	2163	SIMS and multiply adjh charged near5 mass adj separat\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:55
S10 6	0	SIMS and multiply adj charged near5 mass adj separat\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:55
S10 7	0	multiply adj charged near5 mass adj separat\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:55
S10 8	18	SIMS and multiply adj charged and mass adj separat\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 16:56
S10 9	0	SIMS and primary adj beam near5 mass adj filter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 17:04

## EAST Search History

S11 0	10	SIMS and beam near5 mass adj filter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/03 17:05
S11 1	1	"5196706".PN.	USPAT; USOCR	OR	ON	2007/12/03 17:21
S11 2	1	"4924104".PN.	USPAT; USOCR	OR	ON	2007/12/03 17:21